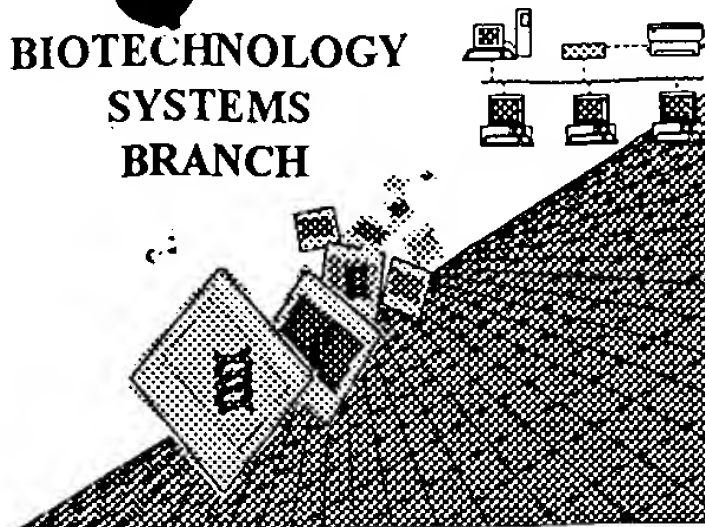


RAW SEQUENCE LISTING
ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/822,849
Source: OIPF
Date Processed by STIC: 4/19/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/822,849

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 Misaligned Amino Acid The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 Variable Length Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.
- 7 PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) . Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
sections for Artificial or Unknown sequences.
- 8 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(OLD RULES) (2) INFORMATION FOR SEQ ID NO:X:
 (i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
 This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 Skipped Sequences Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES) <210> sequence id number
 <400> sequence id number
 000
- 10 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES) Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 Use of "Artificial" Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
(NEW RULES) Valid response is Artificial Sequence.
- 12 Use of <220>Feature Sequence(s) are missing the <220>Feature and associated headings.
(NEW RULES) Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:41

Input Set : A:\seq1st.txt
Output Set: N:\CRF3\04192001\I822849.raw

Does Not Comply
Corrected Diskette Needed

ppr 1-16

3 <110> APPLICANT: Wong, Gordon G.
4 Clark, Hilary
5 Fechtel, Kim
6 Agostino, Michael J.
7 Howes, Steven H.
8 Resnick, Richard J.
9 Gulukota, Kamalakar
10 Graham, James R.
11 Genetics Institute, Inc.
13 <120> TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING NOVEL SECRETED PROTEINS
15 <130> FILE REFERENCE: GIN 6403
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OK 18 <141> CURRENT FILING DATE: 2001-03-29
20 <150> PRIOR APPLICATION NUMBER: 60/195,582
21 <151> PRIOR FILING DATE: 2000-04-06
23 <160> NUMBER OF SEQ ID NOS: 598
25 <170> SOFTWARE: PatentIn Ver. 2.0

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(global error)

*→ see item 10
on Error Summary
Sheet*

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

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item 10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

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TIME: 13:35:41

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1011 ct 1502
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P.4

Item 10

Item 10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:41

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Output Set: N:\CRF3\04192001\I822849.raw

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Item 10

P.S

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:41

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Item 10

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:41

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Item 10

Item 10

P.7

RAW SEQUENCE LISTING
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RAW SEQUENCE LISTING
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2872 gcgacatcgc cgtggagtgg gagagcagcg ggcagccgga gaacaactac aacaccacgc 1440
2873 ctcccatgct ggactccgac ggctccttct tctctacag caagctcacc gtggacaaga 1500
2874 gcaggtggca gcaggggaac atcttctcat gctccgtgat gcatgaggct ctgcacaacc 1560
2875 gcttcacgca gaagagcctc tccctgtctc cgggtaaatg agtgcgacgg ccggcaagcc 1620
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Item 10

Item 10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:41

Input Set : A:\seq1st.txt
Output Set: N:\CRF3\04192001\I822849.raw

2877 ttcccgggca cccagcatgg aaataaagca cccagcgctg ccctgggccc ctgcct 1736

2879 <210> SEQ ID NO: 99

2880 <211> LENGTH: 1379

2881 <212> TYPE: DNA

2882 <213> ORGANISM: Homo sapiens

2884 <400> SEQUENCE: 99

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2887 agaggttaag taactttcct gatgttgac agccactaag tgacaaagcc tgaactcttt 180
2888 ccgcctcact acactgcctc tacttcacca atctctgccc cgaggcccca tctttcatct 240
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2891 agtctcagct tcaaacactc gggcttggtt tcccataagt acattcatcc ttgtcaaata 420
2892 tgtgtcctga tctttgcttt ggaaaatgtg gtccacagaa gtgagctgtg ctctattttg 480
2893 acgctgaatc ttactcagct tgtggtcaac tccctccttc acttggtgtt ttccttggtt 540
2894 atttgtgtcg agccaaatta tgttgtagg ttttgtcact aacgaacccc ttgcaactcat 600
2895 ccctgctgaa tttcacccgg gtttcacagg accttcttcc tctaaccctt ccaactggaa 660
2896 gtccctcccc tctctgctgt ggggtttggc cccctccca accttctgtc atttcaagtc 720
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2903 accatttggc agaaggtcct ttaactcagt cctggccctc gactacacc cgttgtctga 1140
2904 gcaactgagg ctcccaggct ggttgctagg tgcagggtc aaacaatgta gtgtgacagt 1200
2905 tccgcagccc acctcagggg cctccccaag ccacaagggt gtggtttgca gtctgggtac 1260
2906 attctgtacc ctactctgg gggcggttt gtggttccaa gtgctgtgca gccgagcccc 1320
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2909 <210> SEQ ID NO: 100

2910 <211> LENGTH: 1309

2911 <212> TYPE: DNA

2912 <213> ORGANISM: Homo sapiens

2914 <400> SEQUENCE: 100

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2917 tctctgtggc ctcaagcact cgcctccctt agaactgtc attctagggc catgactact 180
2918 actctaaatg aatctcctgc agagactttc tgccacattt tccctcctc tctctaggca 240
2919 gcttagcaac ttgtctgcct gttgtagtat ttattacct aattcattat tagctgggac 300
2920 ctactgagag ttttgaggca ttggagaatg aggtctctat aagagtcagg ttcaatctga 360
2921 gagcaaactg tgttggtgat gggaatttag aaaagggtatt tcttggttgc agaggggaag 420
2922 gaggtgtgtg gcttttccct tatctctgaa gccaaacttt gatttaggca aaacttttaa 480
2923 ctattaagga cctccagtgt gaaacagctt agatggtggc aaaagactgg ctgaggctat 540
2924 aagagataca gggaaagatt tgaaagttag gtggaggaca ggcagggaga aaaggtggaa 600
2925 atatgcttct cagtccactc gtccactacc atctccacct tcattgccac cagaaatttg 660
2926 cagaagcgcc ttagaggagg ttctagaata ccgaaaagac atgatcgctg tacgaattat 720
2927 acaaagtggc ccgtgtctct cgcaaaactg gtttgatctt ctcatgtgtt agttagagaa 780
2928 gataattagg aaaggaagtg ttaggggttt gatttcagga tcttagtaat tgtagagagt 840
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:41

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Output Set: N:\CRF3\04192001\I822849.raw

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2931 tgtagggtgg cagtggatca tgggtgtttt cctatatcag agcttgatat gtttggttaag 1020
2932 aggtctgtga cggggcacgg tgactcatgc ctgtaatccc agcacttttg gagggccagg 1080
2933 cagggtggacc acctgaggtc aggaattcaa gaccagcctg accaacaagg tgaaacccca 1140
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2935 ctgggctaag gtagtagaat tgcttgaacc tgggacgctg aggtttcagt gagctgagat 1260
E--> 2936 **cacgccactg cncctccagcc tgggtgggtg acagagcaag actccgtct** 1309 *Item 10*
2938 <210> SEQ ID NO: 101
2939 <211> LENGTH: 1322
2940 <212> TYPE: DNA
2941 <213> ORGANISM: Homo sapiens
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2945 cctggatttt ggggacgggg aaagaaggct tcagttctgc agtgcaaaat gtctcaatca 120
2946 atacaaaatg gacattttct acaagagac ccaggccaat cttccagctg ggctgtgcag 180
2947 cacattacac cctcccatgg aaaataaagc agaaggcacc ggggtgcagc tgctcactcc 240
2948 agactcttgg aatatccgc taacagatgc tcggaggag gcccctccc cgggtggctac 300
2949 agctggccaa agccagggcc ctggcccgtc ggcgtccacc accgtctctc catctgacac 360
2950 tgcaactgct ctgtcactaa aatccccacg ccagtgccca agtccatccc catcagcgag 420
2951 actccaaata tccctcctgt cttcgtccag ccacctgcta gcatcgggcc tccccttggc 480
2952 gtcccgcctc ggagccctcc catggtgatg accaaccgcg ggccgggtgc gcttgcccat 540
2953 ctttatggag cagcagatca tgcagcagat ccgcccgcct ttcattccgc ggccctccga 600
2954 ccatgcctcc aaccccaaca gcccctgtc caaccccatg cttcccggca tcgggcccc 660
2955 gcccggtggc ccagaaacc tgggccccac tttcagcccc atgcaccggc ccatgctatc 720
2956 gcccacatc cccccccga gacccccac catgcccggg aacccccag gctgctgcc 780
2957 cccgcgcct cggggcgccc cgtgcccag tcttcccttt ccgccagtga gcatgatgcc 840
2958 aaatggcccg atgcccgtgc ccagatgat gaatttcggg ctgccgtgc ttgccccgct 900
2959 ggtgcccgc cgcacctgc tcgtgccgta ctgctgatcg tgcccctacc ggtggccatc 960
2960 ccatcccat cctatccctt acgttagcga cttcaagccc cccaacgggt tctccagcaa 1020
2961 cggggagAAC ttcattccga acgcccctgg cgaactccgc gcggcgggcg gcaagccaag 1080
2962 cggacactcc ctgtgccgc gggactccaa gcaggacac gcacgacgga gtcattcgac 1140
2963 ctgaccgtgg acgactgga gcccggtgc acagcgtgta tccaccgtgc gctgcacgcg 1200
E--> 2964 **cacnnncaag gcggtatcgc agccggggcg cgcgagcgc aggactgcgg cggctgcagg** 1260 *Item 10*
2965 gacggccact gcagcccgc cccgcggcg acccaggccc gggcgcgccg gcgggccccg 1320
2966 ag 1322
2968 <210> SEQ ID NO: 102
2969 <211> LENGTH: 1908
2970 <212> TYPE: DNA
2971 <213> ORGANISM: Homo sapiens
2973 <400> SEQUENCE: 102
2974 cgcttttttt tttttttttt ttttttttgg attaaatata agtcttagca cctttggcat 60
2975 ttttgtccaa acagacttcg acatatgaag tggggacata accctcttca tcttcatttc 120
2976 tccgaatgcg ggtccagcca tcgctttgt cttcctctat gacatacaat gtttctcctt 180
2977 caactacgga aatcgcttct tcattctgac cttcaaatgt gtagagagct ttgcacgtcc 240
2978 ctatggcagg gaggggctcc tcatcatcaa actcgtcgtc aaaatccgtg gccagcacct 300
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:41

Input Set : A:\seq1st.txt
Output Set: N:\CRF3\04192001\I822849.raw

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2985 ttttccttct ttgttcagggt gggagggtgc tgaaatcctc cgggtgttgc cccttatttt 720
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2987 cttctcctct ggaatttgaa aggcgtgttat ctgacacagt gcgcttcatt ggctgagtgt 840
2988 aatcctcaaa ttcaatgtct ccaggagggt caaacctga ttataagct tctattacca 900
2989 gctgtgaatc atttttctga tcaattgatt cggctgcttt tactattcca tccaggcact 960
2990 tcccaatgat tgggatcacc tgccgatcaa cctctgcata tgtcttcatt gactctccca 1020
2991 ttctcacaat cctcctttcc tccatctctt gtattttctg gaagatgttg gggatgtgag 1080
2992 tatggtaata ttcatgctgc tcatggttga atttctggag aatggatgag taatctgctt 1140
2993 tgctgtcctc tgccatttgg tgacgtattt gagcttgttg tcgggccttt tcaacatccg 1200
2994 cttttgtgac attgatgtca gcgtccattt tctcaaagta ctgctgcgcc ctgtccgcct 1260
2995 ctttgcaatc gcgttcaaat cgccttttac tagattcaag ctgcttcagg caagtctcga 1320
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2998 gctgccctgc gtaatcattc atatcgttca ggttggaat gaaagcttta catgacgtat 1500
2999 acttgatttc ttcttctctc ttogagttct ttttaggttg gtacttcttt gaaagattcc 1560
3000 tgagttgctt tgcatagctg agttcaatct ctgtccttcc tttcacaac ttgatataatt 1620
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Item 10

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3007 <210> SEQ ID NO: 103
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3009 <212> TYPE: DNA
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3012 <400> SEQUENCE: 103

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3015 aggcgcagct tgtgcagctc gggggagaat tggatgcagc tggagggtcc gtgagactct 180
3016 cctgtgaagc ctctggattc ccccttagaa attacgaaat gaattgggtc cgcagagctc 240
3017 caggggaagg gctggaatgg atttcataca tcagtagcag tggcaattcc aaatattacg 300
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3019 tacatttgag cagcctgaga ccgaagaca cggctgtcta ctactgtgc agagacctga 420
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3031 agtacaagtg caaggctctc aacaaagccc tcccagcccc catcgagaaa accatctcca 1140
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Item 10

see p. 13

RAW SEQUENCE LISTING
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3049 ctggggccctc agtgagggtc tcttgcaaga cttctggtta cagttttacc aactacggtg 180
3050 tcacctgggt gcgccaggcc cctggacaag gccttgagtg gatgggatgg atcaacactg 240
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3052 cggccacgag cacagcccac atggaactga ggggcctgaa atctgacgac acggccgttt 360
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3054 agggaaacct ggtcacgctc tctcagcct ccaccaaggg cccatcggtc ttccccctgg 480
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3063 caaagccgcg ggaggagcag tacaacagca cgtaccgtgt ggtcagcgtc ctcaccgtcc 1020
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3073 ctggg 1565 *hem 10*
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3398 <211> LENGTH: 2410
3399 <212> TYPE: DNA
3400 <213> ORGANISM: Homo sapiens
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3405 aagacattct attctacact aaacatttaa tttgaaacat gtggttcttg gaaaatatgc 180
3406 cgtcttccat gtttataatt aatgctgaca taattaatga cctcaaaatt caagaaagcc 240
3407 ttttactttt gagcatatcc atgccatctt taaatacgca cactgtactc tctggtatac 300
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RAW SEQUENCE LISTING
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3411 ataaccacca cttcaactgt gtaacactca gttaaaacaa cagcaattca aataatcaag 540
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3417 tatttgcaca tatccttaat taaatgtgtc accctaccac aacgtgcttt ttaactcaac 900
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3422 ctagataatc tcaagttctt ttctaagtca atgaactgaa attcacttct aaacttagca 1200
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3424 ttttccttcc taataaggta taaatcaaaa taattttgtg aaaagtggca actgaagtgc 1320
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3429 ggggaagcgg gggggtcggg ggagacggag ttctcgtctt gccacgggct ggagtgaat 1620
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3436 cccaaacacg gtcatttaga tggcaagcaa ctccactgct ttacatccca atgcatttcc 2040
3437 tccgacttaa aatataactg aagagaatta aaatctattt ctaaaaatga gaagttggtc 2100
3438 ttttcgtctc ccgtgcctta aacagtaact ctagggagag aacgtcaagg gtgccatttc 2160
E--> 3439 gtgtaaggct ttcttgggat gaagtgttct ctcagnaaga tcngngtttt tnagatgaac 2220
E--> 3440 gccgaggctt gaanacatcg aacagcccgc ctnaagcggc ctggctcgan agccgggaaa 2280
3441 ccaggcgagg cgccaaagcc cgggcttggg ctgatcggtt cagcccgccc ctcccgatcc 2340
3442 cccgcggggc tgggatgggg ccgggcccgc ccacgacggc cgtccgcacg gagaggccca 2400
3443 gcgtcgccaa 2410
3445 <210> SEQ ID NO: 116
3446 <211> LENGTH: 984
3447 <212> TYPE: DNA
3448 <213> ORGANISM: Homo sapiens
3450 <400> SEQUENCE: 116
3451 ggctatcttg gggcactcca ggccaggagt ttgaaaccag cttgtgcaat gaagtgaagc 60
3452 cctagctcta aaaaaataaa atagaaacaa attagccagg tgtggtgggt cacacctgta 120
E--> 3453 gtcccagcca ctcaggaggt tgaggcagga ggatcgcntg agcccaggat gcggagattg 180
E--> 3454 cagtgaagcng agatcgtgcc actgcactcc agtgtgggtg acagagcaag agcctgtctc 240
3455 tttaaaacaa aacaaaaatg ccacctttgg ggagaaactt tgaggccatg ccaatatccc 300
3456 acatcccgtt tttcctcaaa cttccacca ctaattttac catccattgg tggccggggc 360
3457 ttgtctacag cagttactgc tgtgctgttt ccctgatggc aggtttttgt gtgcctctc 420
3458 attccatcta catttattaa ttggaactct tctgtgaagg aagacctgtc ccttccccct 480
3459 tattttctta tttagttact aatttatatc ctaatgggct catagatact tgttttaac 540

```

*see
p. 15, too*

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:42

Input Set : A:\seq1st.txt

Output Set: N:\CRF3\04192001\I822849.raw

```

3460 tagcacattc ctttttcatg tgataaaagc tcccaagttc caagtaaatt cctagcattg 600
3461 cctctcacac agcaggaaga acggcacttt tcctacgtgg taaccagggc cttagggaac 660
3462 ttggaaagaa catgaacagg ttctggttgt tcattcattt attttccttc actcagcaaa 720
3463 tatgcatttg agcacctact atctgcttct aggcactagg gattcgggaa tgaaaaaaca 780
E--> 3464 anctccttac cttaggggaa cggacatcct actggagaat aaaacagtaa acagataaaa 840
3465 agtgaatatg gggctgggca cggtggtctc cacctgtaat cccaacacct ttgggaggcc 900
E--> 3466 aaggtgggcg ggtcacttgc ggtcaggagt tcaagaccng cctggccaac atggtggccn 960
3467 tctctactaa acccgtctc ttat 984

4225 <210> SEQ ID NO: 141
4226 <211> LENGTH: 1492
4227 <212> TYPE: DNA
4228 <213> ORGANISM: Homo sapiens
4230 <400> SEQUENCE: 141
4231 ctccctttc ctgctgctga ggtagggatt ggggggtcag aaccactca cttttgcctg 60
4232 ttaaagttgc cctcctgacg ctggcagctc tgccttggtc actggggatg cggctcgttg 120
4233 ctacagccacc agtggccttg cggatattgt caccatccac tagagtggga tgaagtccag 180
4234 agtgtgggta tacatctcag atgcccactt acccactggg gacttcaatg ccagctgcat 240
4235 ttgggtttggt tttcttaact gttggcttct cccacacagc ttttttgttt ttttttaaac 300
4236 attcatattg ttttcaaact tggaattcat agacactctg gctctagggt ccttaagggg 360
4237 gaaaacaaaa gatgacttta tttcacatc aagaaaatca gttcagttcc aaagctgtgg 420
4238 tccttccagc cacttctagg gacactgggg aaccttggtt aacgttgaca tcagtgtctt 480
4239 ccagccgtgc tgtcacctc ctatcttctg gatctgcctt cgggatggtc agtgacagct 540
4240 tctggaagct gagcacacac aggtgcacag ccatgctgtg gtctggcctg ctacggcagc 600
4241 atggcagctc tgggtggagc ttctcccttg catttggttc ccctgtgcca agtagctgca 660
4242 ggctgccccct caaatcttca tttgtccctt ttactttcct gcagaacaag cctgggttag 720
4243 agggctctgct ggaaatggcc tttgaagaca aggataccag gatgtgtgca ctctgtcgtg 780
4244 ttctgtgatg aatgggaaac gtaggcttcc agaaagccag ctctcttctg aaatgtgacg 840
4245 gacctaaagca ggaagtcac caggacagga gtggctcagt gttggggatg gacgtgtctg 900
4246 ccagcccatg ctccaccagg gccaccaatg tgtagttggc tgggtgtctt cgggcattgt 960
4247 agacctgctc ttactgttt ccacccact tgggtggcctc caggatggta gtggcaccct 1020
E--> 4248 cagagcccca tcttcagcat gttctgaggc gtgagagtgg aagtgnccgc taaggctctg 1080
4249 tgtggacgcc tctctcccgat gatctaaagg ggacactgta ctcaagcttt tgacctcatg 1140
4250 ccttgtgtag taaaaaagga tgtgggggtt ttgtgtggtt cgtgagaggg ttgtgtgttg 1200
4251 tttttgtttc cttttgttta tgttttggtt ttctctcttt gtctttccat gtagaccaga 1260
4252 tatttgaaag ggcagacgat ggctagaggt gtaatgtgcg gcttgtttat gcggtatttt 1320
4253 gggaaactta cgttgggtgg gaaatcgagt cgtggattca ccaggccggt gctggcacac 1380
4254 tcacctcgc cctttcctcc ggttcagtac ctattgtttc tcctttcaaa tatgtgattg 1440
E--> 4255 tactagctct ttccatntga aagaattctc cttattttaa taaaaaagt tt 1492

5754 <210> SEQ ID NO: 201
5755 <211> LENGTH: 1169
5756 <212> TYPE: DNA
5757 <213> ORGANISM: Homo sapiens
5759 <400> SEQUENCE: 201
5760 aaccaacca aaccagtga gttttttaga acctttagaa ggggtgtctt tattcaggtt 60
5761 ttactgtaat ggtaaggatt gactcaagag acagtattag taaatttatt gtgtatggat 120
E--> 5762 caaaagtga taatgtatga atgagagcng taagaaggat ttttattttg ttataattta 180
5763 gttaccattt tcagtgttat ttcaaagggt ctttgaagaa ttttggggca gggcatcaga 240
5764 ttagagtttt aaaatttgag tattttggat atcagtgttc ctcatgaaga tatacatgga 300
E--> 5765 tattcaattt tgatggcttc cagatttgta agattgnatg ntgtatatac cattctatta 360

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see p. 16, too

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:42

Input Set : A:\seq1st.txt
Output Set: N:\CRF3\04192001\I822849.raw

```

5766 agaaacatgt ccactgtgct ttcaaacata gataaagcat gataaagatt attattttaag 420
5767 atatacttgt atttatacct cagatattct tttgggtttt gtaccgcaag gcttttttct 480
5768 tcttattgta aatacacttt acgtgaatac agtctaagtg aagaaaataa ataaaaggaa 540
5769 gaggtttata acttgctcta tatctgtaca gattataatc aataagtga ctattattaa 600
5770 atgttttaaag taagggaata gtctgggctg ccttccttaa tattgcatct cactcccacc 660
E--> 5771 cttaaaacca cagattgcaa agcatagcat tttngcatca actacaatca aaagagcgat 720
5772 ttgctgaagg aaaaatcgga ctgcaaatac ttccaaggcc aaactgcaac tgagccaccc 780
E--> 5773 actcccaaac nggaaaccct ggtgaagggt caggaagcac ggagattctc tccaacaaag 840
E--> 5774 gtccngttag gaaacgacgc tgagaggatg acgacaacgt gcaacagcag aaagatgctt 900
E--> 5775 gcaagcngag tcagggtcac cagtgaatgc cacaaaagtt ctctttccca ctgtttaatt 960
5776 tgacaagaga agaatttgaa ggatatgaac attttcaaga actctgctga ggtcacttag 1020
5777 agcgccatca caacttattt gtgtgactaa ttgcctagat tgtaagctct ttgagggcag 1080
E--> 5778 ggcttgtctc ttacacatct ttntaatccc ctgcngcggc tttcagtnnt ttgtacttgt 1140
E--> 5779 nggcncctaa taaatttatt atttgctat 1169

```

item 10

FYI

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY
 PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
 TIME: 13:35:46

Input Set : A:\seq1st.txt
 Output Set: N:\CRF3\04192001\I822849.raw

L:17 M:270 C: Current Application Number differs, Replaced Application Number
 L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:184 M:283 W: Missing Blank Line separator, <400> field identifier
 L:527 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:13
 L:998 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:28
 L:1144 M:283 W: Missing Blank Line separator, <400> field identifier
 L:1157 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:36
 L:1395 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:47
 M:340 Repeated in SeqNo=47
 L:1465 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:49
 M:340 Repeated in SeqNo=49
 L:1744 M:283 W: Missing Blank Line separator, <400> field identifier
 L:1984 M:283 W: Missing Blank Line separator, <400> field identifier
 L:2109 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:73
 L:2374 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:80
 L:2489 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:84
 M:340 Repeated in SeqNo=84
 L:2522 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:85
 L:2680 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:92
 M:340 Repeated in SeqNo=92
 L:2728 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:94
 L:2798 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:96
 L:2841 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:97
 L:2868 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:98
 M:340 Repeated in SeqNo=98
 L:2907 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:99
 L:2936 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:100
 L:2964 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:101
 L:3002 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:102
 L:3030 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:103
 M:340 Repeated in SeqNo=103
 L:3072 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:104
 L:3394 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:114
 L:3439 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:115
 M:340 Repeated in SeqNo=115
 L:3453 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:116
 M:340 Repeated in SeqNo=116
 L:3567 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:120
 L:3622 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:122
 L:4222 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:140
 L:4248 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:141
 M:340 Repeated in SeqNo=141
 L:4292 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:142
 L:4337 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:143
 L:4362 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:144
 L:4387 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:145
 L:4475 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:148
 L:4725 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:157

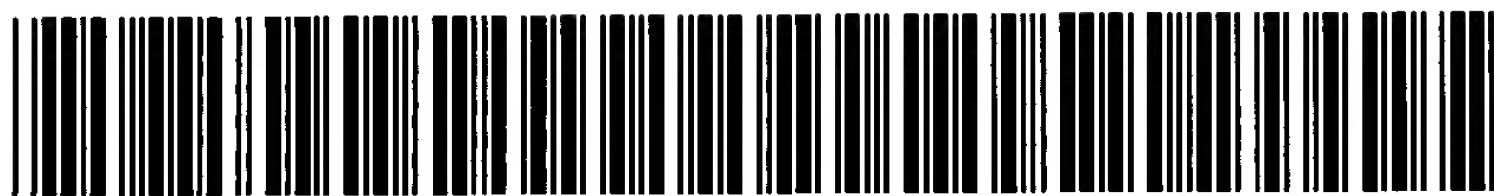
VERIFICATION SUMMARY
PATENT APPLICATION: US/09/822,849

DATE: 04/19/2001
TIME: 13:35:46

Input Set : A:\seq1st.txt
Output Set: N:\CRF3\04192001\I822849.raw

L:4971 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:164
L:4984 M:283 W: Missing Blank Line separator, <400> field identifier
L:5187 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:174
L:5375 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:183
L:5571 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:192
L:5607 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:193
L:5656 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:195
L:5762 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:201
M:340 Repeated in SeqNo=201
L:9184 M:283 W: Missing Blank Line separator, <400> field identifier
L:12904 M:283 W: Missing Blank Line separator, <400> field identifier
L:16024 M:283 W: Missing Blank Line separator, <400> field identifier
L:16744 M:283 W: Missing Blank Line separator, <400> field identifier
L:17944 M:283 W: Missing Blank Line separator, <400> field identifier
L:18439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:595
L:18454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:596
L:18469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:597

US 0982284905P1



Creation date: 03-01-2003

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Dossier: 09822849

Legal Date: 04-09-2001

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1	OATH	42

Total number of pages: 42

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